

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

Form C-101  
May 27, 2004

Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

|   |   |   |
|---|---|---|
| <sup>1</sup> Operator Name and Address<br>Energen Resources Corporation<br>3300 N. A St., Bldg. 4, Ste. 100 Midland, TX 79705 |   | <sup>2</sup> OGRID Number<br>162928       |
| <sup>4</sup> Property Code<br>34934   | <sup>5</sup> Property Name<br>BRAZOS DEEP STATE | <sup>3</sup> API Number<br>30- 025- 37361 |
| <sup>9</sup> Proposed Pool 1<br>Wildcat <i>Devonian</i>   |   | <sup>6</sup> Well No.<br>1                |
| <sup>10</sup> Proposed Pool 2   |   |   |

<sup>7</sup> Surface Location

|                    |               |                  |               |          |                      |                           |                      |                        |               |
|--------------------|---------------|------------------|---------------|----------|----------------------|---------------------------|----------------------|------------------------|---------------|
| UL or lot no.<br>P | Section<br>34 | Township<br>14-S | Range<br>33-E | Lot. Idn | Feet from the<br>660 | North/South Line<br>South | Feet from the<br>710 | East/West line<br>East | County<br>Lea |
|--------------------|---------------|------------------|---------------|----------|----------------------|---------------------------|----------------------|------------------------|---------------|

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

|               |         |          |       |          |               |                  |               |                |        |
|---------------|---------|----------|-------|----------|---------------|------------------|---------------|----------------|--------|
| UL or lot no. | Section | Township | Range | Lot. Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|----------|---------------|------------------|---------------|----------------|--------|

Additional Well Location

|  |  |   |                                     |   |
|--|--|---|-------------------------------------|---|
| <sup>11</sup> Work Type Code<br>N  | <sup>12</sup> Well Type Code<br>O      | <sup>13</sup> Cable/Rotary<br>R                 | <sup>14</sup> Lease Type Code<br>S  | <sup>15</sup> Ground Level Elevation<br>4192' |
| <sup>16</sup> Multiple<br>No   | <sup>17</sup> Proposed Depth<br>14,000 | <sup>18</sup> Formation<br>Siluro-Devonian      | <sup>19</sup> Contractor<br>Unknown | <sup>20</sup> Spud Date<br>ASAP               |
| Depth to ground water<br>116'  |  | Distance from nearest fresh water well<br>2500' |                                     | Distance from nearest surface water<br>5207'  |
| Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume 12M bbls Drilling Method:<br>Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/> |  |   |                                     |   |

<sup>21</sup> Proposed Casing and Cement Program

| Hole Size  | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|--|-------------|--------------------|---------------|-----------------|---------------|
| 17-1/2"  | 13-3/8"     | 48.00#             | 400'          | 400             | Surface       |
| 12-1/4"  | 9-5/8"      | 40.00#             | 6,000'        | 2,000           | Surface       |
| 8-3/4"/7-7/8"  | 5-1/2"      | 17.00#             | 14,000'       | 1,500           | 5,500'        |
| Permit Expires 1 Year From Approval<br>Date Unless Drilling Underway |             |                    |               |                 |               |

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Plan to drill a 17-1/2" hole to approx. 400', run 13-3/8" 48.00# casing and cement to surface. Will then install a 13-3/8" SOW wellhead, NU a 13-5/8"/5M# hydraulic double ram and annular BOP stack with a 4"/5M# choke manifold. Drill a 12-1/4" hole to approx. 6,000'; run 9-5/8" 40.00# casing and attempt to cement to surface. Will then NU and test the same BOP stack and drill an 8-3/4"/7-7/8" hole to approx. 14,000'. If primary objective shows to be commercial, will run 5-1/2" 17.00# casing and attempt to tie the cement back into the 9-5/8" intermediate casing. If non-commercial, will P&A as per the OCD's requirements.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐, or an (attached) alternative OCD-approved plan ☐

Signature: *Carolyn Larson*  
Printed name: Carolyn Larson

Title: Regulatory Analyst

E-mail Address: clarson@energen.com

Date: 7-11-2005

Phone: (432) 684-3693

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: JUL 14 2005

Expiration Date:

Conditions of Approval:

Attached ☐

PETROLEUM ENGINEER

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                   |   |                                      |
|-----------------------------------|---|--------------------------------------|
| API Number<br><b>30-025-37361</b> | Pool Code<br><b>97455</b>                             | Pool Name<br><b>Wildcat Devonian</b> |
| Property Code<br><b>34934</b>     | Property Name<br><b>BRAZOS DEEP STATE</b>             | Well Number<br><b>1</b>              |
| OGRID No.<br><b>162928</b>        | Operator Name<br><b>ENERGEN RESOURCES CORPORATION</b> | Elevation<br><b>4192'</b>            |

Surface Location

| UL or lot No. | Section   | Township    | Range       | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|------------|
| <b>P</b>      | <b>34</b> | <b>14 S</b> | <b>33 E</b> |         | <b>660</b>    | <b>SOUTH</b>     | <b>710</b>    | <b>EAST</b>    | <b>LEA</b> |

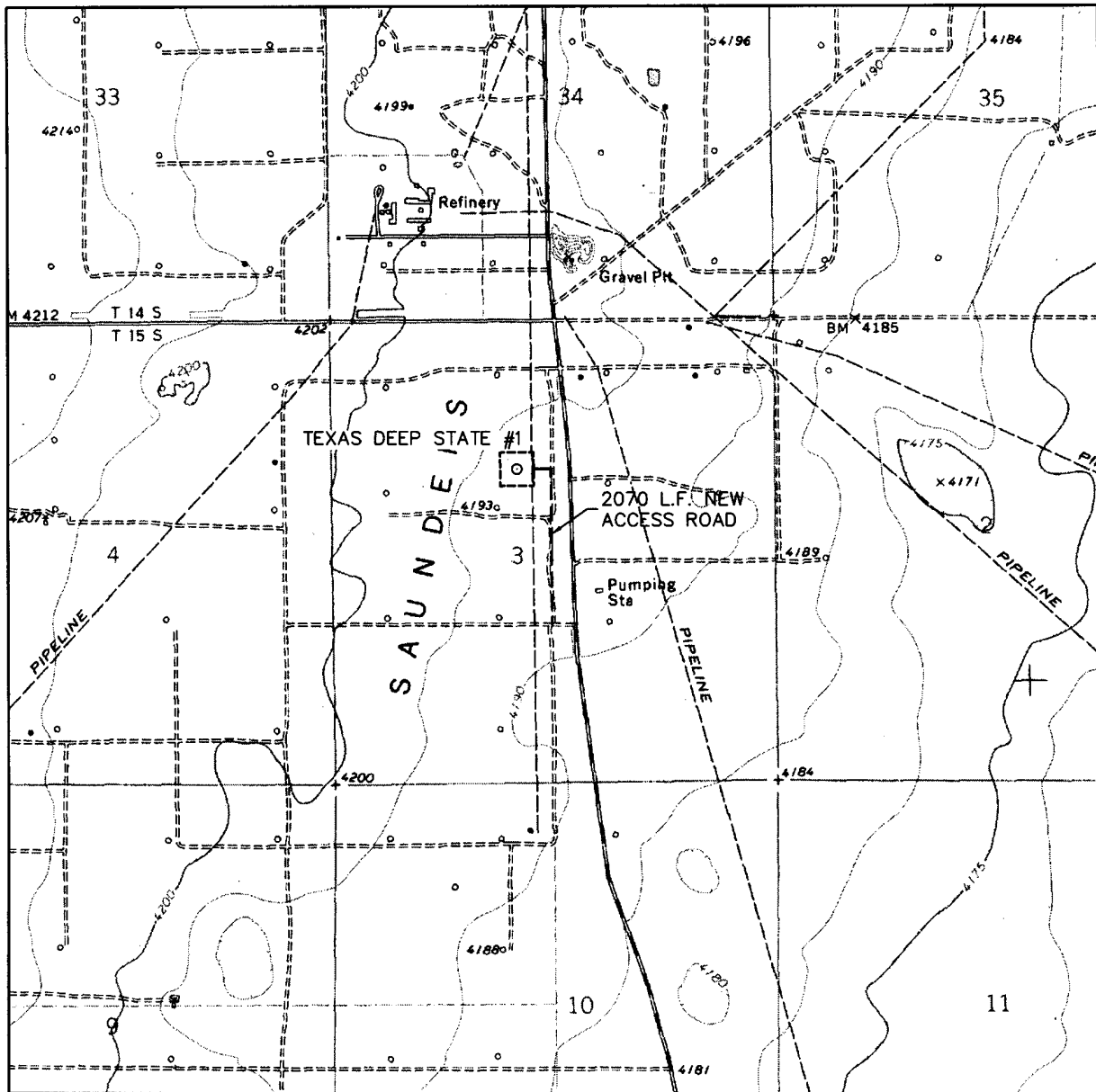
Bottom Hole Location If Different From Surface

| UL or lot No.                | Section         | Township           | Range     | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|------------------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
|                              |                 |                    |           |         |               |                  |               |                |        |
| Dedicated Acres<br><b>40</b> | Joint or Infill | Consolidation Code | Order No. |         |               |                  |               |                |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|  |  |   |
|--|--|---|
| <p>NOTE:</p> <p>1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.</p> | <p>Plane Coordinate<br/>X = 726,074.7<br/>Y = 748,505.1<br/>4191.8' 4191.7'<br/>4191.2' 4189.9'<br/>660'</p> | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Carolyn Larson</i><br/>Signature<br/>Carolyn Larson<br/>Printed Name<br/>Regulatory Analyst<br/>Title<br/>7-11-2005<br/>Date</p>  |
|  |  | <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my upervison and that the same is true and orrect to the best of my belief.</p> <p>June 22, 2005<br/>Date Surveyed<br/>Signature &amp; Seal of Professional Surveyor<br/><i>Macdonald</i><br/>W.O. Num. 2005-0574<br/>Certificate No. MACON McDONALD 12185</p> |

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
FORT RANCH - 5'

SEC. 3 TWP. 15-S RGE. 33-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY \_\_\_\_\_ LEA

DESCRIPTION 1810' FNL & 2210' FWL

ELEVATION 4194'

OPERATOR ENERGEN RESOURCES CORPORATION

LEASE TEXAS DEEP STATE

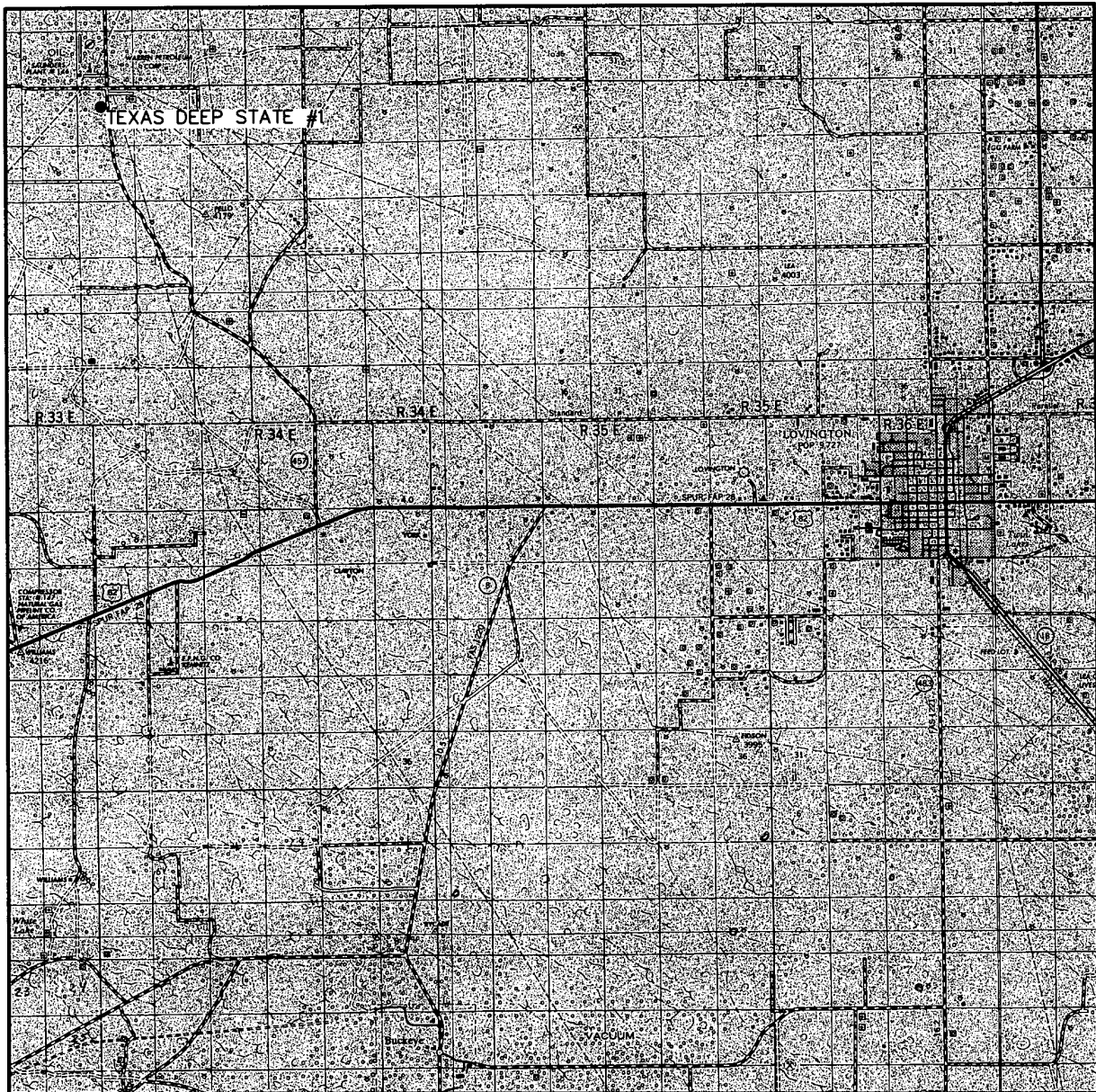
U.S.G.S. TOPOGRAPHIC MAP  
FORT RANCH, N.M.



**WEST  
COMPANY**  
of Midland, Inc.

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

# VICINITY MAP



SCALE: 1" = 3 MILES

SEC. 3 TWP. 15-S RGE. 33-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY \_\_\_\_\_ LEA

DESCRIPTION 1810' FNL & 2210' FWL

ELEVATION 4194'

OPERATOR ENERGEN RESOURCES CORPORATION

LEASE TEXAS DEEP STATE



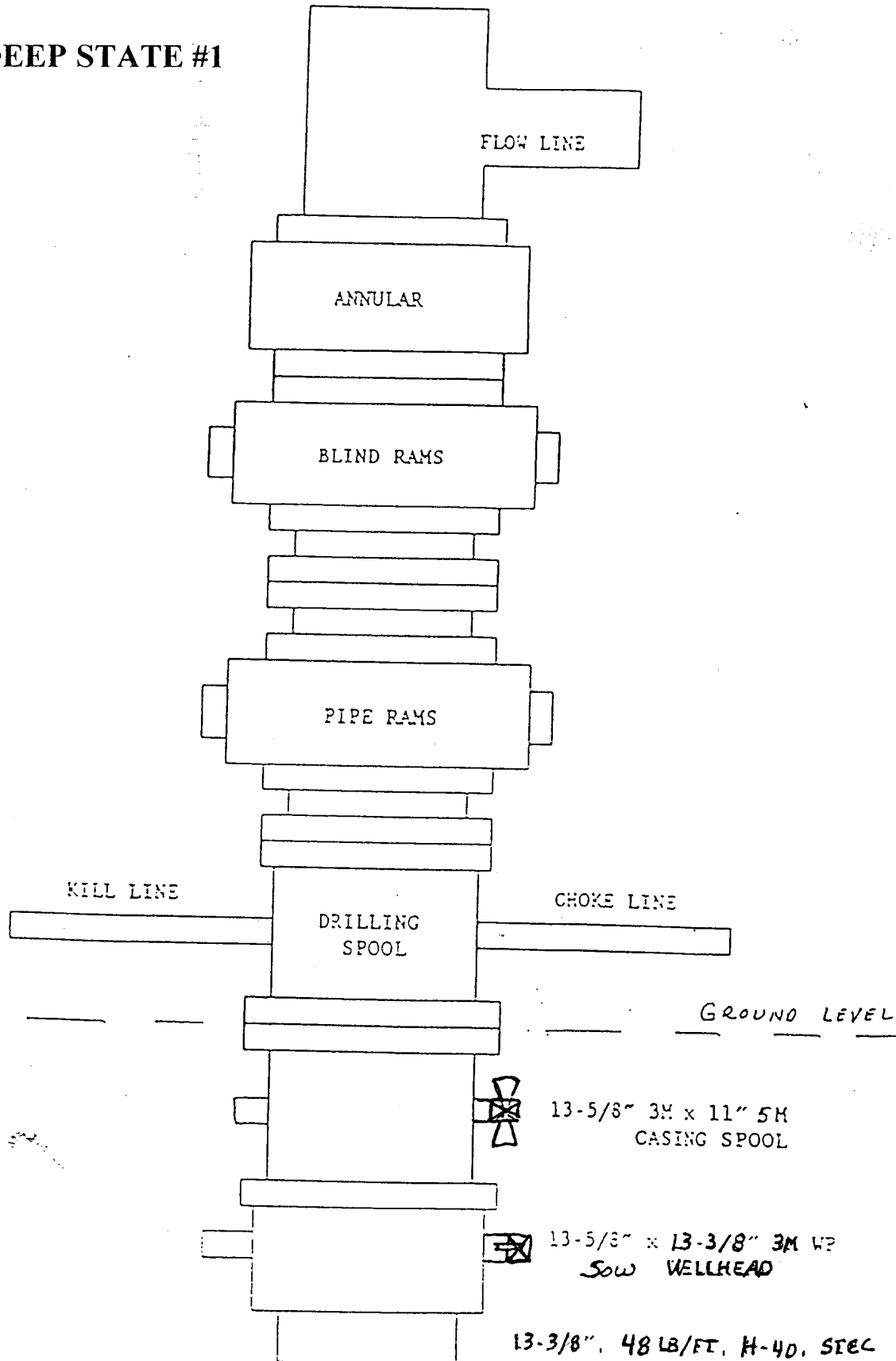
**WEST  
COMPANY**  
of Midland, Inc.

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

# ENERGEN RESOURCES CORPORATION

## BOP EQUIPMENT

BRAZOS DEEP STATE #1



MINIMUM BOP REQUIREMENT 5,000 PSI W.P.